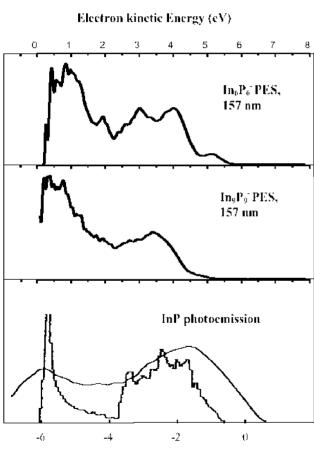
## Evolution of band structure in indium phosphide clusters: D. M. Neumark, U.C. Berkeley



Energy below valence band edge (eV)

- Photoelectron (PE) spectra of size-selected InP cluster anions reveals electronic structure of neutral cluster
- In<sub>6</sub>P<sub>6</sub><sup>-</sup> PE spectrum (top) shows discrete states characteristic of small molecules
- In the In<sub>9</sub>P<sub>9</sub>- PE spectrum (center), these states have coalesced into two bands similar to those seen in photoemission from bulk InP (bottom)

## Educational accomplishments

- Two graduate students have received training under this grant during the past year
- One student from an under-represented group (Harry Gomez, from Puerto Rico) will receive his Ph. D. this summer and will work at Intel (in Oregon)